

New Pattern for the Solution of



Engineering and Scientific Problems



## IBM 610 Auto-Point Computer



Now! for the first time the new **IBM 610** gives engineers and scientists a desk-side computing tool using large-scale computer techniques. Arithmetic and logical problems now can be solved on the spot.... your idea can be explored when it is born, before it becomes a "some day" project. The 610 is easy for you to use as well as to learn. Here are some of the reasons for its simple, direct operation—

Automatic Positioning of Decimal Point © Easy, Fast, Direct Programming © Mobile, Desk-side Convenience © Multiple Instructions via a Single Key © Fifteen Digit Input and Output © Cathode Ray Tube Display © Decimal or Octal Arithmetic © Highspeed Printed Numerical Output © Identifying Headings by Manual Typing.



## INPUT

A manual keyboard designed for simplicity and flexibility is available for entry of data and instructions. Additional data and program input can be made automatically from 5- or 8-channel punched paper tape.

## CONTROL

Keyboard The 610 keyboard, although the size of a typewriter keyboard, provides complete manual control of the machine by the operator. Program tapes can be prepared while manually solving a problem, allowing automatic re-run of all similar problems. Data also can be entered into the console for computation... or into tape for future use.

Memory Eighty storage registers and four special registers are available on the magnetic drum of the Auto-Point Computer. Each offers thirty-one digit positions of storage plus a sign and decimal point.

Tape Read and punch tape units are provided for both the program and data tapes allowing automatic duplication whenever necessary. Tape density is 10 characters per inch. Eightchannel tape with class selection on standard five-channel teletype tape may be used. Five-channel tape coding can be used for relay of data from or to remote locations with no additional processing.

Control Panel In addition to tape stored programs, two-hundred program steps are available from the control panel. Since transfer of control is extremely simple, the panel offers a convenient means for storing frequently used mathematical subroutines. Many logical facilities also are provided.

## OUTPUT

Visual access to the contents of all registers is always available from the cathode ray tube display on the keyboard. A high-speed electric typewriter provides printed, numerical output. The typewriter allows manual insertion of identifying alphabetic information such as headings while providing automatic operations such as carriage return, tab stops, and others. Punched tape output gives a permanent record for transmission or re-use.

A few applications

> of the 610 Auto-Point Computer



Heat Transfer Calculations Analysis of Mass Spectrometric Data Formulae Evaluations Calculation of Aeroelasticity Stress Analysis Flutter and Vibration Analysis **Data Reduction** Highway Design Bridge Design Surveying Problems Matrix Arithmetic Correlation and Regression Analysis Sales Forecasting **Actuarial Calculations** Analysis of Variance Curve Fitting

...and the versatile IBM 610 may be used in many other applications.

Experimental Design

IBM

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